

60,130-1118  
01MRA0235**AMENDMENTS TO THE SPECIFICATION:**

Please replace paragraph [22] with the following:

- [22] Figure 4 illustrates an embodiment incorporating this particular feature. As illustrated previously, conductive coil 14 is disposed about magnetized plunger 10. Current source 22 normally generates current to create electromagnetic field 30 either in the direction of arrow A or arrow B. In addition to these elements, switch 34 controls whether current flows from and to battery 38 from circuit 42. When maximum damping is required, current source 22 is switched "on" while switch 34 is switched "off." On the other hand, when less damping is required, current source 22 is switched "off" and switch 34 is switched "on," permitting some current to flow to battery 38 but damping still occurs. As the velocity of magnetized plunger 10 increases, the available electrical energy also increases because the output is proportional to velocity. Accordingly, movement of magnetized plunger 10 may be slowed when load inputs are significant. When significant damping is not required, however, this embodiment permits these ~~road~~ load inputs to also charge battery 38. For small displacements of magnetized plunger 10 at low frequency, such as low vehicle speeds on a smooth road, the switching circuit may have to supply coil current from the battery to affect the magnetic damping force required. While battery 38 inserts a small amount of resistance to the circuit, which will modify the current in coil 14, the resistance may be compensated by variations in the duty cycle of switch 34. As shown in Figure 1, control unit 84 may be used in conjunction with sensor 80 to determine the direction and level of movement of wheel 26. Control unit 84 may thus control switches 22 and 34 and control the level of damping and the charging of battery 38.